

# Bourdon tube pressure gauge, heavy-duty version

## Stainless steel case, liquid filling, NS 80

### Model PG21HD

WIKA data sheet PM 02.13

#### Applications

- For measuring points with high dynamic pressure loads and vibrations
- For gaseous and liquid media that are not highly viscous or crystallising and will not attack copper alloy parts
- Hydraulics
- Pumps and compressors

#### Special features

- Vibration and shock-resistant
- Especially robust design



Fig. left: Model PG21HD, radial connection  
 Fig. right: Model PG21HD, back mount connection, with mounting bracket

#### Description

The model PG21HD Bourdon tube pressure gauge is suitable for measuring points with high demands on the measurement accuracy, reproducibility and long-term stability. A multitude of options enables users to adapt the instruments to their specific requirements.

The model PG21HD pressure gauges are based on the proven Bourdon tube measuring system. On pressurisation, the deflection of the Bourdon tube, proportional to the incident pressure, is transmitted to the movement via a link and indicated.

The model PG21HD meets the requirements of the international industry standard EN 837-1 for Bourdon tube pressure gauges.

The instrument complies with the accuracy class 1.0 and is thus suited for a wide range of applications in the machine-building and equipment-manufacturing industries. Resistance to shock and vibration is provided due to the glycerine case filling.

The mounting bracket, which is available as an option, enables the panel mounting of pressure gauges with back mount process connection.

The model PG21HD is also available in customer-specific versions, e.g. with individual dial layout.

## Specifications

### Design

EN 837-1

### Nominal size in mm

80

### Accuracy class

1.0

### Scale ranges

-1 ... 1.5 to -1 ... 15 bar

0 ... 0.6 to 0 ... 600 bar

### Pressure limitation

Steady: Full scale value

Fluctuating: 0.9 x full scale value

Short time: 1.3 x full scale value

### Permissible temperature

Ambient: -20 ... +60 °C

Medium: +80 °C maximum

### Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C):

max.  $\pm 0.3 \%$  /10 K of the span

### Ingress protection per IEC/EN 60529

IP65

### Process connection

Copper alloy

Lower mount (radial) or centre back mount, G 1/2 B male

### Pressure element

$\leq 40$  bar copper alloy,  $> 40$  bar stainless steel

### Movement

Copper alloy

### Dial

Aluminium, white

### Pointer

Aluminium, black

### Case

Stainless steel

### Window

Plastic, crystal-clear

### Ring

Crimped triangular bezel, stainless steel

### System fill fluid

Glycerine

## Options

- Other process connection
- Restrictor: 0.3 or 0.6 mm, brass
- Case: Stainless steel, polished
- Overload safety: 1.5 x full scale value
- Window: Laminated safety glass
- Mounting bracket
- Panel or surface mounting flange
- Filling liquid: Silicone oil
- Without liquid filling (IP54)

Panel mounting flange



## Approvals

Logo	Description	Country
CE	EU declaration of conformity Pressure equipment directive	European Union

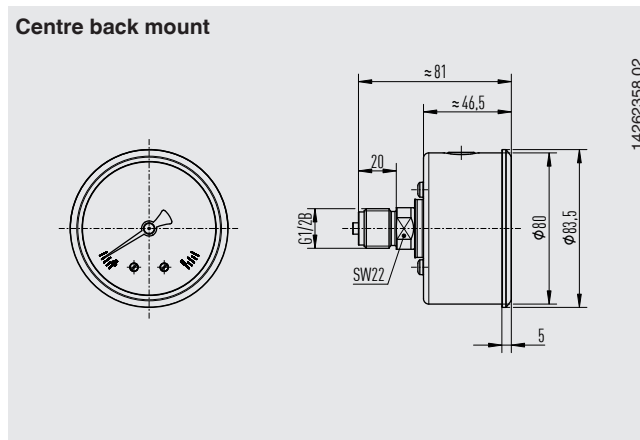
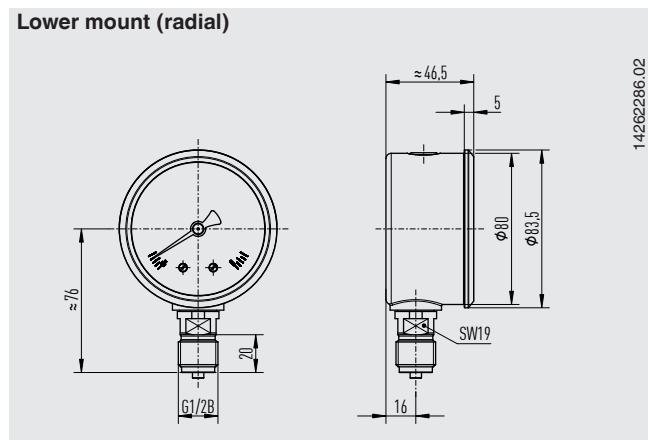
## Certificates (option)

- 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)
- 3.1 inspection certificate per EN 10204 (e.g. indication accuracy)

Approvals and certificates, see website

## Dimensions in mm

### Standard version



## Ordering information

Model / Scale range / Filling liquid / Process connection / Connection location / Options

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